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EXAMINER

NGUYEN, MINH DIEU T

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,440

Applicant(s)

LAHTEENMAKI, MARKKU

Examiner

Minh Dieu Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34-36 is/are allowed.
- 6) ☒ Claim(s) 1,2,7,10,15,16,21,22 and 28-33 is/are rejected.
- 7) ☒ Claim(s) 3-6, 8-9, 11-14, 17-20, and 23-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication dated July 22, 2005 with the amendments to claims 1, 16, 28, 32 and 33 and the addition of claims 34-36.
2. Claims 1-36 are pending.

Specification

3. The amendment to the specification dated July 22, 2005 has been entered.

Response to Arguments

4. Applicant's arguments filed July 22, 2005 have been fully considered but they are not persuasive.
5. Applicant argues that the combination of Geiger with Cutaia does not teach or suggest each and every one of limitations in claims 1, 16, 28 and 32-33. Specifically, Geiger does not teach or suggest directing the network connection to an enrollment module to register for the authentication certificate if the received certificate does not correspond to the authentication certificate, and Cutaia does not teach or suggest providing authentication certificate at the registration step and direct users to register for the authentication certificate using a user identity and private key.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections

are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The examiner maintains that Geiger does disclose enrolling and authenticating domain members and attributes (i.e. access rights) in col. 10, lines 32-37. However, he does not disclose directing to an enrollment module to register for the certificate if the authentication fails (as admitted in the previous Office action). Cutaia was brought in to address this missing limitation.

Cutaia discloses the concept of directing either to the inquiry services (Fig. 2, element 208; i.e. targeted service) or registration services (Fig. 2, element 206) based on whether or not the customer's inquiry information contained "cookie" (page 5, paragraph [0040], i.e. a file loaded on user computer identifying the registration information), this cookie reads on authentication certificate. In other words, if the cookie is not included in the inquiry information (i.e. authentication fails), the system connects to enrollment services. In this paragraph [0040], Cutaia further discloses the registration information includes username and password (i.e. user identity and private key).

6. As to claim 22, applicant argues that Bisbee is silent as to enabling enrollment for authentication certificates in situations where authentication fails.

Again, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Both Geiger and Cutaia do not disclose authentication certificate comprises at least one of an identity verification authentication certificate, an authorization certificate and a non-repudiation certificate. Bisbee was brought to address this limitation and Bisbee discloses explicitly authentication certificate comprises at least one of an identity verification authentication certificate, an authorization certificate and a non-repudiation certificate in col. 2, lines 46-64.

7. The arguments on claims 28-31 are addressed the same as to above claim 1.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2, 7, 10, 15-16, 21 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (6,463,534) in view of Cutaia et al. (2002/0004390).

a) As to claims 1 and 32-33, Geiger discloses a method of conducting transactions in a wireless electronic commerce system comprising receiving a certificate with indication of access rights (col. 11, lines 1-10) from the wireless terminal (Fig. 4; wireless device with certificates stored in WIM (WAP Identity Module or Wireless

Identity Module) (col. 11, line 64 to col. 12, line 8; col. 17, lines 14-17) communicates with attribute authorities); determining whether the received certificate corresponds to a service provider authentication certificate which identifies access rights for a targeted service (col. 12, lines 19-21); directing the network connection to the targeted service if the received certificate corresponds to the service provider authentication certificate (col. 14, lines 36-42).

However, Geiger does not disclose directing the network connection to an enrollment module to register for the certificate if the received certificate does not correspond to the service provider authentication certificate.

Cutaia discloses a method and system for managing telecommunications services and network interconnections comprising the step of directing to enrollment to register for registration information (i.e. file loaded on computer, known as "cookie", to identify registration information) if the received inquiry does not contain registration information (page 5, paragraph [0040]) which reads on the step of directing the network connection to an enrollment module to register for the certificate using a user identity and a private key (i.e. username and password) if the received certificate does not correspond to the service provider authentication certificate.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ to use of directing the connection to an enrollment module to register for the certificate if the received certificate does not correspond to the service provider authentication certificate in the system of Geiger, as Cutaia teaches so as to provide users with proper registration procedures before accessing services.

b) As to claim 2, Geiger discloses the step of providing a list of one or more available predetermined certificates to the wireless terminal (col. 6, lines 1-4).

c) As to claim 7, Geiger discloses the step of receiving a certificate comprising receiving the certificate via a client certificate message issued by the wireless terminal (col. 13, lines 53-57).

d) As to claim 10, Geiger discloses the access rights possessed by the user are stored as local certificates on a Wireless Identity Module (i.e. license certificate, col. 5, lines 16-22; col. 11, line 64 – col. 12, line 8).

e) As to claim 15, Geiger discloses the step of determining whether the received certificate corresponds to a service provider authentication certificate comprising comparing the received certificate to the service provider authentication certificate (col. 12, lines 19-21).

f) As to claim 16, Geiger discloses a system of conducting transactions in a wireless electronic commerce system comprising a service module from which a service provider avails the secure service to the user of the wireless terminal (Fig. 4, elements 404-406).

However Geiger does not disclose an enrollment manager to effect user registration to the secure service using a user identity and a private key and a switch module coupled to receive a security certificate in establishing a connection wherein the switch module directs the connection to either the service module or the enrollment manager depending on the security certificate.

Cutaia discloses a method and system for managing telecommunications services and network interconnections comprising an enrollment manager to effect user registration to the secure service using a user identity and a private key (page 5, paragraph [0040]), i.e. username and password) and a switch module to direct the connection to either the inquiry services (Fig. 2, element 208; i.e. service module) or the enrollment manager (Fig. 2, element 206) depending on the registration information (i.e. file loaded on computer, known as "cookie", to identify registration information) (page 5, paragraph [0040], i.e. the certificate).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ to use of having a switch module coupled to receive a security certificate in establishing a connection wherein the switch module directs the connection to either the service module or the enrollment manager depending on the security certificate in the system of Geiger, as Cutaia teaches so as to provide users with proper registration procedures before accessing services.

g) As to claim 21, Geiger discloses the security certificate comprises an authentication certificate (col. 16, lines 42-44).

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (6,463,534) in view of Cutaia et al. (2002/0004390) and further in view of Bisbee et al. (6,367,013).

Geiger discloses authentication certificate, however he does not disclose the authentication certificate comprises at least one of an identity verification authentication certificate, an authorization certificate and a non-repudiation certificate.

Bisbee discloses a system and method for electronic transmission, storage and retrieval of authenticated electronic original documents wherein the authentication certificate comprises at least one of an identity verification authentication certificate, an authorization certificate and a non-repudiation certificate (col. 2, lines 46-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ to use of authentication certificate comprising an identity verification authentication certificate, an authorization certificate and a non-repudiation certificate in the system of Geiger and Cutaia, as Bisbee teaches so as to provide the requisite security for electronic wireless transaction.

11. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajan et al. (6,633,910) in view of Geiger et al. (6,463,534) and further in view of Cutaia et al. (2002/0004390).

a) As to claim 28, Rajan discloses a system of gathering data and transmission over wired and wireless network connections comprising a wireless network including a plurality of wireless terminals operable therein (Fig. 1, elements 13, 39, 41 and 43); a network of computing systems (Fig. 1, elements 11, 15) wherein at least one of the computing systems comprises a server computing system (Fig. 1, elements 21, 23, 25) hosting a secure service (col. 4, line 61 to col. 5, line 5) targeted

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by at least one of the wireless terminals (Fig. 2) and wherein at least one of the computing systems comprises an enrollment server (Fig. 1, element 33; col. 6, lines 12-16; col. 7, lines 10-13; col. 10, line 57) to effect user registration to the secure service; a gateway computing system configured to bridge communications between the wireless network and the network of computing systems (Fig. 1, element 37).

Rajan discloses digital authorization certificates, secure digital signature forms may be held in the content servers, however, Rajan does not disclose a network switch coupled to receive an authentication certificate utilized by a wireless terminal in establishing a connection with the network of computing systems, wherein the network switch switches the connection to the server computing system or the enrollment server depending on the authentication certificate utilized by the wireless terminal in establishing the connection.

Geiger discloses a system of conducting transactions in a wireless electronic commerce system comprising authentication certificate utilized by a wireless terminal (Fig. 4; wireless device with certificates stored in WIM (WAP Identity Module or Wireless Identity Module) (col. 11, line 64 to col. 12, line 8; col. 17, lines 14-17) in establishing a connection with the network of computing systems.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ to use of utilizing authentication certificate by a wireless terminal in establishing a connection with the network of computing systems in the system of Rajan, as Geiger teaches so as to securely provide accesses to services using authentication certificates.

However Rajan and Geiger do not disclose a network switch coupled to receive an authentication certificate utilized by a wireless terminal in establishing a connection with the network of computing systems, wherein the network switch switches the connection to the server computing system or the enrollment server depending on the authentication certificate utilized by the wireless terminal in establishing the connection.

Cutaia discloses the concept of switching either to the inquiry services (Fig. 2, element 208; i.e. server computing system) or registration services (Fig. 2, element 206) based on whether or not the inquiry information from customer contained registration information (i.e. file loaded on computer, known as "cookie", to identify registration information) (page 5, paragraph [0040], i.e. the certificate) and using a user identity and a private key (i.e. username and password) to effect user registration.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ to use of having a network switch coupled to receive an authentication certificate utilized by a wireless terminal in establishing a connection with the network of computing systems, wherein the network switch switches the connection to the server computing system or the enrollment server depending on the authentication certificate utilized by the wireless terminal in establishing the connection in the system of Rajan and Geiger, as Cutaia teaches so as to provide users with proper registration procedures before accessing services.

b) As to claim 29, Geiger discloses the gateway computing system comprises a Wireless Application Protocol gateway (Fig. 1, element 18),

and at least the wireless terminal establishing the connection with the network of computing system comprises a WAP-compliant terminal (Fig. 1, element 11).

c) As to claim 30, Rajan discloses the WAP-compliant terminal comprises one of a wireless telephone, personal digital assistant, wireless pager and wireless laptop computer (col. 1, lines 45-48).

d) As to claim 31, Rajan discloses the network of computing systems comprises the Internet ((Fig. 1, element 11) and wherein the Wireless Application Protocol is used to communicate between the wireless terminal and the Internet (Fig. 1 , element 37).

Allowable Subject Matter

12. Claims 3-6, 8-9, 11-14, 17-20, 23-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 34-36 are allowed.

The prior arts of Rajan et al. (6,633,910), Geiger et al. (6,463,534), Cutaia et al. (2002/0004390) and Bisbee et al. (6,367,013) do not disclose the system of claim 34 wherein an authentication certificate identification module delivers the plurality of authentication certificates to the wireless terminal with a preferred order indication identifying a preferred order of use for connecting to the secure service and a compare module coupled to receive an authentication certificate from the wireless terminal

corresponding to the highest order authentication certificate available at the wireless terminal based on the preferred order indication.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873. The examiner can normally be reached on M-F 6:00-2:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

mdn
mdn
9/27/05

Minh Dieu Nguyen
Examiner
Art Unit 2137

E. Moise
EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER